

4/21/05

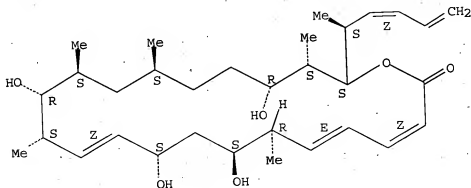
ANSWER 1 OF 10 CAPLUS
 ACCESSION NUMBER:
 DOCUMENT NUMBER:
 TITLE:
 AUTHOR(S):
 CORPORATE SOURCE:
 SOURCE:
 PUBLISHER:
 DOCUMENT TYPE:
 LANGUAGE:
 GI

COPYRIGHT 2005 ACS on STN
 2005:23545 CAPLUS
 142:261320
 Ring-Closing Metathesis Approach to Dictyostatin
 Kangani, Cyrus O.; Brueckner, Arndt M.; Curran,
 Dennis P.
 Department of Chemistry, University of Pittsburgh,
 Pittsburgh, PA, 15260, USA
 Organic Letters (2005), 7(3), 379-382
 CODEN: ORLEP7; ISSN: 1523-7060
 American Chemical Society
 Journal
 English

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB An esterification/ring-closing metathesis approach to dictyostatin and
 discodermolide intermediate I via II is introduced. The approach provides
 for facile fragment coupling of two main segments of these natural
 products at the C10-C11 alkene with high to complete Z-selectivity.
 IT 156312-07-1P, Dictyostatin
 RL: PNU (Preparation, unclassified); PREP (Preparation)
 (ring-closing metathesis approach to dictyostatin)
 RN 156312-07-1 CAPLUS
 CN Oxacyclodocosa-3,5,11-trien-2-one, 8,10,14,20-tetrahydroxy-7,13,15,17,21-
 pentamethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-,
 (3Z,5E,7R,8S,10S,11Z,13S,14R,15S,17S,20R,21S,22S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as described by E or Z.



REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:782447 CAPLUS
 DOCUMENT NUMBER: 141:410752
 TITLE: Total synthesis of (-)-dictyostatin: Confirmation of
 relative and absolute configurations
 AUTHOR(S): Shin, Youseung; Fournier, Jean-Hugues; Fukui,
 Yoshikazu; Brueckner, Arndt M.; Curran, Dennis P.
 CORPORATE SOURCE: Department of Chemistry, University of Pittsburgh,
 Pittsburgh, PA, 15260, USA
 angewandte Chemie, International Edition (2004),

PUBLISHER:
DOCUMENT TYPE:
LANGUAGE:
GI

CODEN: ACIEF5; ISSN: 1433-7851
Wiley-VCH Verlag GmbH & Co. KGaA
Journal
English

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A total synthesis of (-)-dictyostatin (I) has ended the decade-old masquerade and identified the winner as a structure recently proposed by Paterson and Wright. Our synthesis utilized 3 key fragments, phosphonate ester II, disilylated alkyne III, and enal IV. III was metalated and added to IV to give an alkynyl ketone which was asym. reduced. The latter resulting compound was then subjected to Lindlar hydrogenation to give adduct V as a single isomer. Several further transformations, including a coupling reaction with II, gave I.

IT 156312-07-1P

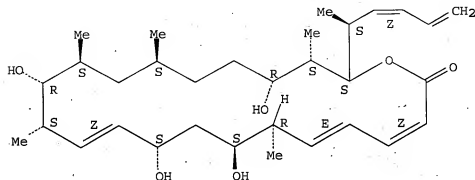
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(total synthesis of (-)-dictyostatin and confirmation of absolute configuration)

RN 156312-07-1 CAPLUS

CN Oxacyclodocosa-3,5,11-trien-2-one, 8,10,14,20-tetrahydroxy-7,13,15,17,21-pentamethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (3Z,5E,7R,8S,10S,11Z,13S,14R,15S,17S,20R,21S,22S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as described by E or Z.



IT 792921-91-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(total synthesis of (-)-dictyostatin and confirmation of absolute configuration)

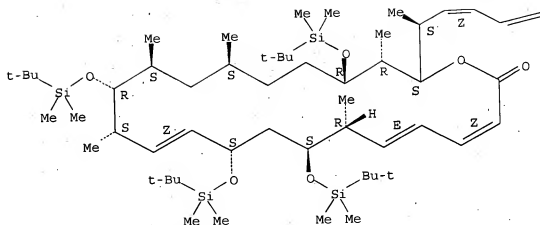
RN 792921-91-6 CAPLUS

CN Oxacyclodocosa-3,5,11-trien-2-one, 8,10,14,20-tetrakis[(1,1-dimethylethyl)dimethylsilyloxy]-7,13,15,17,21-pentamethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (3Z,5E,7R,8S,10S,11Z,13S,14R,15S,17S,20R,21R,22S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by E or Z.

PAGE 1-A

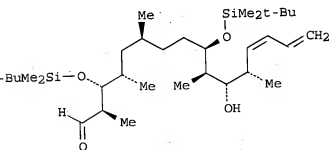
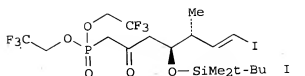


PAGE 1-B

=CH₂

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:782446 CAPLUS
 DOCUMENT NUMBER: 141:410751
 TITLE: Total synthesis and configurational assignment of
 (-)-dictyostatin, a microtubule-stabilizing macrolide
 of marine sponge origin
 AUTHOR(S): Paterson, Ian; Britton, Robert; Delgado, Oscar; Meyer,
 Arndt; Poullennec, Karine G.
 CORPORATE SOURCE: University Chemical Laboratory, Cambridge, CB2 1EW, UK
 SOURCE: Angewandte Chemie, International Edition (2004),
 43(35), 4629-4633
 CODEN: ACIEF5; ISSN: 1433-7851
 PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



II

B A flexible and modular approach was used in the convergent and highly stereocontrolled synthesis of the antimitotic agent dictyostatin. A key step was the Gemari-type HWE coupling of phosphonate I with aldehyde II. This first total synthesis establishes its full stereochem. and should be amenable to producing useful quantities and designed analogs of this mol., whose conformation closely resembles that of discodermolide.

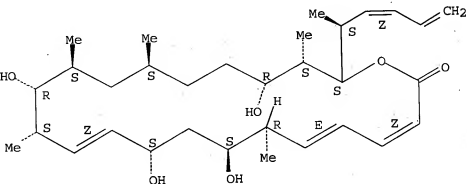
T 156312-07-1P, (-)-Dictyostatin

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (absolute configuration of (-)-dictyostatin by its asym. total synthesis via Horner-Wadsworth-Emmons reaction, Stille cross-coupling, Yamaguchi macrolactonization, and reduction)

RN 156312-07-1 CAPLUS

CN Oxacyclodocosa-3,5,11-trien-2-one, 8,10,14,20-tetrahydroxy-7,13,15,17,21-pentamethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (3Z,5E,7R,8S,10S,11Z,13S,14R,15S,17S,20R,21S,22S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry: Rotation (-).
Double bond geometry as described by E or Z.



IT 792911-15-0P 792911-33-2P

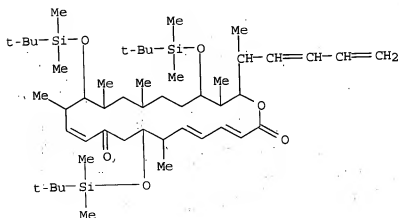
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(absolute configuration of (-)-dictyostatin by its asym. total synthesis via Horner-Wadsworth-Emmons reaction, Stille cross-coupling, Yamaguchi macrolactonization, and reduction)

RN 792911-15-0 CAPLUS

2,5,11-triene-2,10-dione, 8,14,20-tris[[1,1-

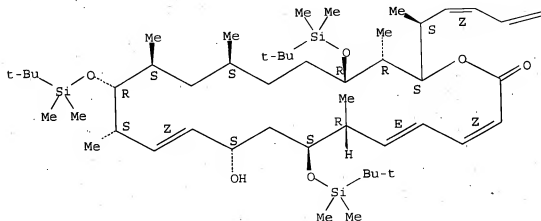
methyl-2,4-pentadienyl]-, (3Z,5E,7S,8R,11Z,13R,14S,15R,17R,20S,21S,22R)-
rel- (9CI) (CA INDEX NAME)



RN 792911-33-2 CAPLUS
CN Oxacyclodocosa-3,5,11-trien-2-one, 8,14,20-tris[[[1,1-dimethylethyl)dimethylsilyl]oxy]-10-hydroxy-7,13,15,17,21-pentamethyl-22-[[[1R,2Z)-1-methyl-2,4-pentadienyl]-, (3Z,5E,7S,8R,10R,11Z,13R,14S,15R,17R,20S,21S,22R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as described by E or Z.

PAGE 1-A



PAGE 1-B

=CH₂

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:220327 CAPLUS
DOCUMENT NUMBER: 140:270672
Preparation of analogs of discodermolide and

antiproliferative and microtubule stabilizing agents
Curran, Dennis P.; Shin, Youseung; Choy, Nakyne; Day,
Billy W.; Balachandran, Raghavan; Madiraju, Charitha;
Turner, Tiffany

PATENT ASSIGNEE(S) :

University of Pittsburgh, USA

SOURCE:

PCT Int. Appl., 132 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

1

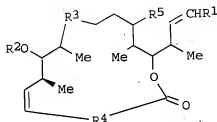
PATENT INFORMATION:

PATENT NO.		KIND		DATE	APPLICATION NO.		DATE	
WO 2004022552		A1		20040318	WO 2003-US327793		20030905	
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW							
RW:	GH, GM, KE, LA, MG, MZ, SD, SL, SZ, TZ, UZ, ZM, ZW, AM, AZ, BY, BG, KR, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FZ, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG							
US 2004186165		A1		20040923	US 2003-655916		20030905	
PRIORITY APPLN. INFO.:					US 2002-408503P		P 20020906	
					US 2003-437366P		P 20030102	

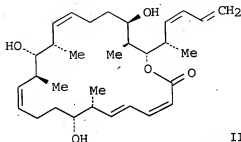
OTHER SOURCE (S) :

CASREACT 140:270672; MARPAT 140:270672

GI



I



II

AB The present invention discloses preparation of analogs of dictyostatin, such as I [R1 = H, alkyl, aryl, alkenyl, alkynyl, halogen; R2 = H, alkyl, aryl, benzyl, trityl, SiR2aR2bR2c, CH2OR2d, CORE; Ra, Rb, Rc = alkyl, aryl; Rd = alkyl; aryl, alkoxylalkyl, SiR2aR2bR2c, benzyl; R1 = alkylene; Re = alkyl, allyl, benzyl, aryl, alkoxy, NrgRh; Rg, Rh = H, alkyl, aryl; R3 = (CH2)n; n = 0-5, CH2CH(CH3), CH:CH, CH:C(CH3), C.tpbond.C; R4 = (CH2)p; p = 4-12, etc.], are prepared for their therapeutic use as antiproliferative and microtubule stabilizing agents. Thus, dictyostatin-1 analog II was prepared via a multistep reaction sequence starting from Me (2S)-3-hydroxy-2-methylpropionate, (4R)-4-benzyl-3-propionyloxazolidin-2-one, p-anisaldehyde-dimethylacetal, 4-(tert-butyl)dimethylsiloxybutanol, 2,6-dimethylphenoxy propionate, 1-bromoallyl trimethylsilane and bis(2,2,2-trifluoroethyl)-(methoxycarbonylmethyl)phosphate. II exhibited antiproliferative activity, GI50 (µM) = 1.4±0.1 and 1.4±0.1 resp., against breast and ovarian cancer cells.

analog 479673-21-7P

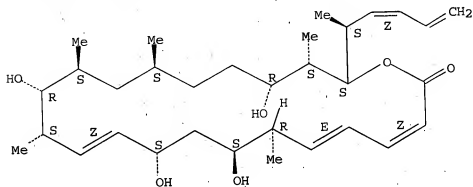
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of analogs of discodermolide and dictyostatin-1 and their use as antiproliferative and microtubule stabilizing agents)

RN 156312-07-1 CAPLUS

CN Oxacyclodocosa-3,5,11-trien-2-one, 8,10,14,20-tetrahydroxy-7,13,15,17,21-pentamethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (3Z,5E,7R,8S,10S,11Z,13S,14R,15S,17S,20R,21S,22S)- (9CI) (CA INDEX NAME)

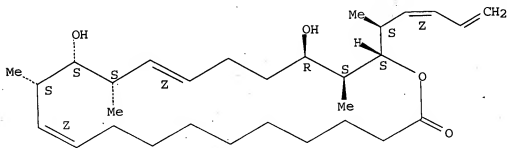
Absolute stereochemistry. Rotation (-).
Double bond geometry as described by E or Z.



RN 479673-21-7 CAPLUS

CN Oxacyclodocosa-11,16-dien-2-one, 14,20-dihydroxy-13,15,21-trimethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (11Z,13S,14S,15S,16Z,20R,21S,22S)- (9CI) (CA INDEX NAME)

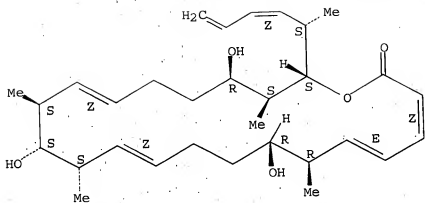
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 479673-35-3 CAPLUS

CN Oxacyclodocosa-3,5,11,16-tetraen-2-one, 8,14,20-trihydroxy-7,13,15,21-tetramethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (3Z,5E,7R,8R,11Z,13S,14S,15S,16Z,20R,21S,22S)- (9CI) (CA INDEX NAME)

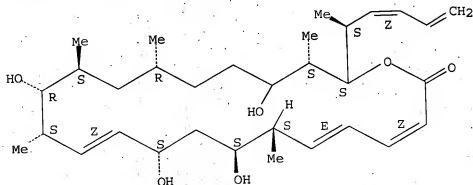
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 674287-58-2 CAPLUS
 CN Oxacyclodocosa-3,5,11-trien-2-one, 8,10,14,20-tetrahydroxy-7,13,15,17,21-pentamethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (3Z,5E,7S,8S,10S,11Z,13S,14R,15S,17R,21S,22S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

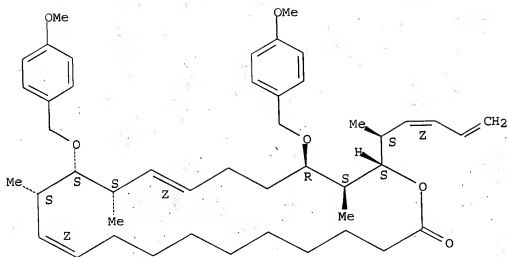
Double bond geometry as described by E or Z.



IT 479673-47-7P 479673-57-9P 672296-56-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of analogs of discodermolide and dictyostatin-1 and their use as antiproliferative and microtubule stabilizing agents)
 RN 479673-47-7 CAPLUS
 CN Oxacyclodocosa-11,16-dien-2-one, 14,20-bis[(4-methoxyphenyl)methoxy]-13,15,21-trimethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (11Z,13S,14S,15S,16Z,20R,21S,22S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

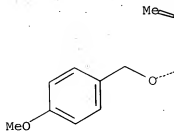
Double bond geometry as described by E or Z.



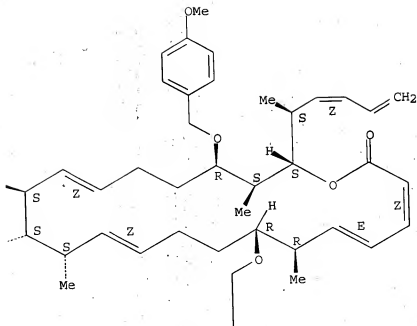
RN 479673-57-9 CAPLUS
 CN Oxacyclodocosa-3,5,11,16-tetraen-2-one, 8,14,20-tris[(4-methoxyphenyl)methoxy]-7,13,15,21-tetramethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (3Z,5E,7R,8R,11Z,13S,14S,15S,16Z,20R,21S,22S)- (9CI) (CA
 INDEX NAME)

Absolute stereochemistry. Rotation (+).
 Double bond geometry as described by E or Z.

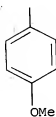
PAGE 1-A



PAGE 1-B



PAGE 2-B



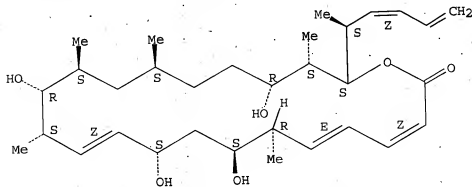
RN 672296-56-9 CAPLUS
 CN Oxacyclodocosa-3,5,11-trien-2-one, 8,10,20-tris[[(1,1-dimethylethyl)dimethylsilyl]oxy]-14-hydroxy-7,13,15,17,21-pentamethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (3Z,5E,7S,8S,10S,11Z,13S,14R,15S,17R,21R,22S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.

(stereochem. determination of dictyostatin, a novel microtubule-stabilizing macrolide from the marine sponge Corallistidae sp.)

RN 156312-07-1 CAPLUS
 CN Oxacyclodocosa-3,5,11-trien-2-one, 8,10,14,20-tetrahydroxy-7,13,15,17,21-pentamethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (3Z,5E,7R,8S,10S,11Z,13S,14R,15S,17S,20R,21S,22S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry: Rotation (-).
 Double bond geometry as described by E or Z.



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:461765 CAPLUS

DOCUMENT NUMBER: 139:358179

TITLE: Tubulin polymerizing activity of dictyostatin-1, a polyketide of marine sponge origin

AUTHOR(S): Isbrucker, Richard A.; Cummins, Jennifer; Pomponi, Shirley A.; Longley, Ross E.; Wright, Amy E.

CORPORATE SOURCE: Division of Biomedical Marine Research, Harbor Branch Oceanographic Institution, Inc., Port Pierce, FL, 34946, USA

SOURCE: Biochemical Pharmacology (2003), 66(1), 75-82

CODEN: BCPA6; ISSN: 0006-2952

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Dictyostatin-1 had previously been isolated from a marine sponge of the genus Spongia sp. and described as a cytotoxic agent to murine and human cancer cells, but its mechanism of activity was unknown. In a routine screening assay used to detect cytotoxic compds. of marine origin, dictyostatin-1 was identified as a highly active component in an extract from a Lithistida sponge and exploration into its pharmacol. was pursued. Initial studies demonstrated that dictyostatin-1 arrested cells in the G2/M phase of the cell cycle. Staining of these cells with antitubulin revealed cells having multiple aster formations and microtubule matrix bundling patterns similar to that seen in cells exposed to paclitaxel. Dictyostatin-1 was able to induce the polymerization of purified bovine brain tubulin in vitro and the polymerized tubulin remained stable at cold temps. Dictyostatin-1 also proved to be highly potent in two paclitaxel-resistant human cancer cell lines expressing active P-glycoprotein. Together, these results indicate that dictyostatin-1 is a potent inducer of tubulin polymerization and retains activity in cells expressing the P-glycoprotein efflux pump.

IT 156312-07-1, Dictyostatin-1
 Mechanism of action: PAC (Pharmacological activity); THU

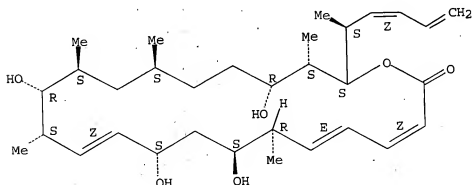
(tubulin polymerizing activity of dictyostatin-1)

RN 156312-07-1 CAPLUS

CN Oxacyclodocosa-3,5,11-trien-2-one, 8,10,14,20-tetrahydroxy-7,13,15,17,21-pentamethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (3Z,5E,7R,8S,10S,11Z,13S,14R,15S,17S,20R,21S,22S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as described by E or Z.



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:870413 CAPLUS

DOCUMENT NUMBER: 138:73122

TITLE: Discodermolide/Dictyostatin Hybrids: Synthesis and

Biological Evaluation

AUTHOR(S): Shin, Youseung; Choy, Nakyeon; Balachandran, Raghavan;

Madiraju, Charitha; Day, Billy W.; Curran, Dennis P.

CORPORATE SOURCE: Department of Chemistry and Department of

Pharmaceutical Sciences, University of Pittsburgh,

Pittsburgh, PA, 15260, USA

SOURCE: Organic Letters (2002), 4(25), 4443-4446

CODEN: ORLEF7; ISSN: 1523-7060

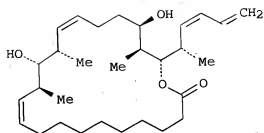
PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

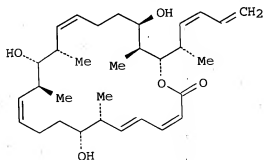
LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:73122

GI



I



II

AB Two hybrid analogs of discodermolide and dictyostatin (I, II) were designed and synthesized. These are the first macrocyclic analogs of discodermolide and biol. activities were evaluated and compared with linear discodermolide analogs.

IT 156312-07-1DP, Dictyostatin-1, analogs 479673-21-7P

479673-35-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

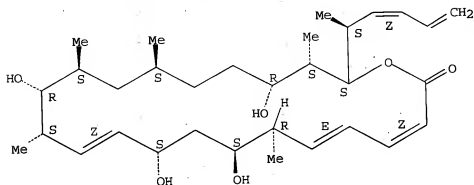
(preparation of discodermolide/dictyostatin hybrids from three asym. fragments and evaluation of their antitumor activity in human cancer cell lines)

RN 156312-07-1 CAPLUS

CN Oxacyclodocosa-3,5,11-trien-2-one, 8,10,14,20-tetrahydroxy-7,13,15,17,21-pentamethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (3Z,5E,7R,8S,10S,11Z,13S,14R,15S,17S,20R,21S,22S) - (9CI) (CA INDEX NAME)

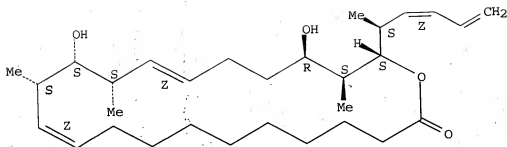
Absolute stereochemistry. Rotation (-).

Double bond geometry as described by E or Z.



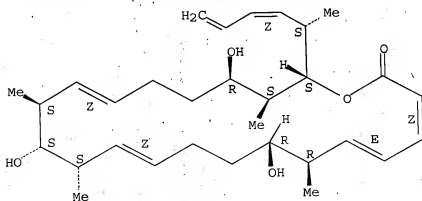
RN 479673-21-7 CAPLUS

CN Oxacyclodocosa-11,16-dien-2-one, 14,20-dihydroxy-13,15,21-trimethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (11Z,13S,14S,15S,16Z,20R,21S,22S) - (9CI) (CA INDEX NAME)



RN 479673-35-3 CAPLUS
 CN Oxacyclodocosa-3,5,11,16-tetraen-2-one, 8,14,20-trihydroxy-7,13,15,21-tetramethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (3Z,5E,7R,8R,11Z,13S,14S,15S,16Z,20R,21S,22S)- (9CI) (CA INDEX NAME)

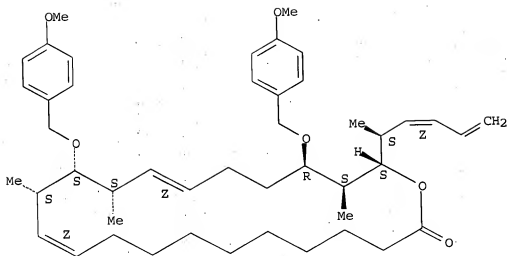
Absolute stereochemistry. Rotation (+).
 Double bond geometry as described by E or Z.



IT 479673-47-7P 479673-57-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of discodermolide/dictyostatin hybrids from three asym. fragments and evaluation of their antitumor activity in human cancer cell lines)

RN 479673-47-7 CAPLUS
 CN Oxacyclodocosa-11,16-dien-2-one, 14,20-bis[(4-methoxyphenyl)methoxy]-13,15,21-trimethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (11Z,13S,14S,15S,16Z,20R,21S,22S)- (9CI) (CA INDEX NAME)

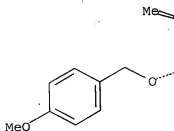
Absolute stereochemistry. Rotation (+).
 Double bond geometry as described by E or Z.



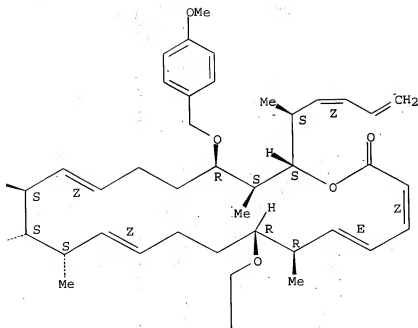
RN 479673-57-9 CAPLUS
 CN Oxacyclodocosa-3,5,11,16-tetraen-2-one, 8,14,20-tris[(4-methoxyphenyl)methoxy]-7,13,15,21-tetramethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (3Z,5E,7R,8R,11Z,13S,14S,15S,16Z,20R,21S,22S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
 Double bond geometry as described by E or Z.

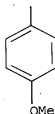
PAGE 1-A



PAGE 1-B



PAGE 2-B



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

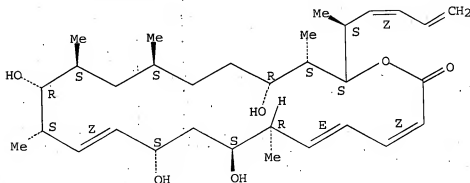
L3 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:635882 CAPLUS
 DOCUMENT NUMBER: 135:200474
 TITLE: Dictyostatin compounds for stabilization of microtubules
 INVENTOR(S): Wright, Amy E.; Cummins, Jennifer L.; Pomponi, Shirley A.; Longley, Ross E.; Isbrucker, Richard A.
 PATENT ASSIGNEE(S): Harbor Branch Oceanographic Institution, Inc., USA
 SOURCE: PCT Int. Appl., 30 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001062239	A2	20010830	WO 2001-US6198	20010226
WO 2001062239	A3	20020124		

W. CA. JP

PT, SE, TR
 CA 2400896 AA 20010830 CA 2001-2400896 20010226
 US 2001056118 A1 20011227 US 2001-793323 20010226
 US 6576658 B2 20030610
 EP 1259245 A2 20021127 EP 2001-911183 20010226
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, FI, CY, TR
 JP 2003523383 T2 20030805 JP 2001-561306 20010226
 US 2003153615 A1 20030814 US 2003-360200 20030206
 US 6677370 B2 20040113
 PRIORITY APPLN. INFO.:
 US 2000-184617P P 20000224
 US 2001-793323 A3 20010226
 WO 2001-US6198 W 20010226
 AB Dictyostatin-1 has been found to stabilize microtubules and prohibit their depolymn. to free tubulin. Because of these activities, the dictyostatin compds. can be used in the treatment of a number of diseases in which aberrant cellular proliferation occurs such as drug-sensitive and drug-resistant cancers, autoimmune disorders, and inflammatory diseases. Dictyostatin-1 was isolated from Corallistidae sponges and the antitumor activity studied.
 IT 156312-07-1P, dictyostatin 1
 RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
 (dictyostatin compds. for stabilization of microtubules)
 RN 156312-07-1 CAPLUS
 CN Oxacyclodocosa-3,5,11-trien-2-one, 8,10,14,20-tetrahydroxy-7,13,15,17,21-pentamethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (3Z,5E,7R,8S,10S,11Z,13S,14R,15S,17S,20R,21S,22S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as described by E or Z.



L3 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1995:733500 CAPLUS
 DOCUMENT NUMBER: 123:139562
 TITLE: Isolation and structure of dictyostatin 1
 INVENTOR(S): Pettit, George R.; Cichacz, Zbigniew A.
 PATENT ASSIGNEE(S): Arizona State University, USA
 SOURCE: U.S., 8 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

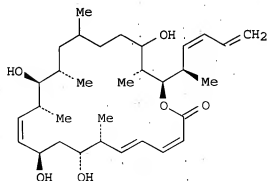
US 5430053
CA 2146880
EP 680958

A 19950704
AA 19951020
A1 19951108

US 1994-229658
CA 1995-2146880
EP 1995-302510

19940419
19950412
19950413

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
PRIORITY APPLN. INFO.:
GI US 1994-229658 A 19940419



I

AB A new-type of macrocyclic lactone denominated dictyostatin 1 (I), bearing a membered ring system, is isolated from a Republic of Maldives marine sponge in the genus *Spongia* sp. and found to strongly inhibit the growth of an important selection of U.S. National Cancer Institute human cancer cell system and the murine P388 lymphocytic leukemia (PS ED50 3.8 + 10-4 mg/mL).

IT 156312-07-1; Dictyostatin 1

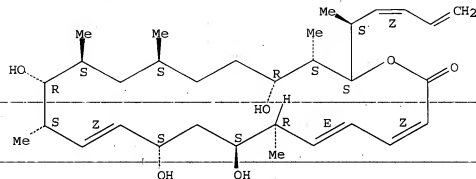
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses) (dictyostatin isolation and structural characterization and cytotoxic activity from marine sponge)

RN 156312-07-1 CAPLUS

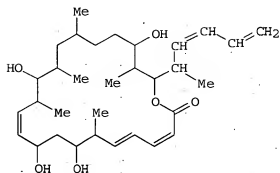
CN Oxacyclodocosa-3,5,11-trien-2-one, 8,10,14,20-tetrahydroxy-7,13,15,17,21-pentamethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-, (3Z,5E,7R,8S,10S,11Z,13S,14R,15S,17S,20R,21S,22S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

Double bond geometry as described by E or Z.



AUTHOR(S): inhibitor dictyostatin 1
 Pettit, George R.; Cichacz, Zbigniew A.; Gao, Feng;
 Boyd, Michael R.; Schmidt, Jean M.
 CORPORATE SOURCE: Cancer Res. Inst., Arizona State Univ., Tempe, AZ,
 85287-1604, USA
 SOURCE: Journal of the Chemical Society, Chemical
 Communications (1994), (9), 1111-12
 CODEN: JCCCAT; ISSN: 0022-4936
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



I

AB Dictyostatin 1 (I), a new type of macrocyclic lactone bearing a
 22-membered ring system, has been isolated (3.4 + 10-7% yield) from
 a Republic of Maldives marine sponge in the genus Spongia and found to
 strongly inhibit growth of the murine P388 lymphocytic leukemia.
 IT 156312-07-1, Dictyostatin 1
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
 BIOL (Biological study); OCCU (Occurrence)
 (of marine sponge, isolation and structure of)
 RN 156312-07-1 CAPLUS
 CN Oxacyclodocosa-3,5,11-trien-2-one, 8,10,14,20-tetrahydroxy-7,13,15,17,21-
 pentamethyl-22-[(1S,2Z)-1-methyl-2,4-pentadienyl]-,
 (3Z,5E,7R,8S,10S,11Z,13S,14R,15S,17S,20R,21S,22S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as described by E or Z.

